Claims

1-41. (Canceled)

42. (Previously Amended) A multi-segmented arm assembly for a dental chair, comprising:

a link arm segment for pivotable attachment to a rear of the dental chair;

a first segment coupled to the link arm segment;

a second segment pivotably connected to the first segment at a substantially vertical pivot axis;

a third segment pivotably connected to the second segment at a substantially horizontal pivot axis; and

a terminal segment pivotably connected to the third segment,

wherein at least one of the segments is configured to have a predetermined normal range of normal rotation about its respective pivot axis and to permit over-rotation beyond the predetermined normal range without damage to the at least one segment.

43. (Previously Amended) The arm assembly of claim 42, wherein the terminal segment is pivotably connected at a substantially horizontal pivot axis.

44. (Previously Amended) The arm assembly of claim 42, further comprising a parallelogram supporting structure for at least one segment.

45. (Previously Amended) The arm assembly of claim 42, further comprising a parallelogram supporting structure for at least the third segment.

46-50. (Canceled)

51. (Previously Amended) A multi-segmented arm assembly for a dental chair, comprising:

a link arm segment for pivotable attachment to a rear of the dental chair;

a first segment coupled to the link arm segment;

a second segment pivotably connected to the first segment at a substantially vertical pivot axis;

a third segment pivotably connected to the second segment at a substantially horizontal pivot axis;

a fourth segment pivotably connected to the third segment at a substantially horizontal pivot axis;

a terminal segment pivotably connected to the fourth segment; and

wherein at least one of the segments is configured to have a predetermined normal range of normal rotation about its respective pivot axis and to permit over-rotation beyond the predetermined normal range without damage to the at least one segment.

52. (Previously Amended) The arm assembly of claim 47, wherein the terminal segment is pivotably connected at a substantially horizontal pivot axis.

53-59. (Canceled)

60. (Previously Amended) The arm assembly of claim 51, wherein the link arm segment has a distal end and the first segment is connected to the link arm segment at the distal end of the link arm segment.

61. (Previously Amended) The arm assembly of claim 51, wherein the first segment has a distal end and the second segment is connected to the first segment at the distal end of the first segment.

62. (Previously Amended) The arm assembly of claim 51, wherein the second segment has a distal end and the third segment is connected to the second segment at the distal end of the second segment.

63. (Previously Amended) The arm assembly of claim 51, wherein the third segment has a distal end and the terminal segment is connected to the third segment at the distal end of the third segment.

64-70. (Canceled)